
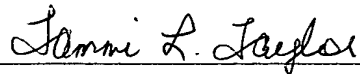


|   |                                      |                                |  |                               |                                  |  |
|---|--------------------------------------|--------------------------------|--|-------------------------------|----------------------------------|--|
| <b>AMENDMENT TRANSMITTAL LETTER (Small Entity)</b>  |                                      |                                |  |                               | Docket No.<br><b>MSU 4.1-560</b> |  |
| Applicant(s): <b>David R. Dilley, Dina L. Kadyrzhanova, Zhenyong Wang and Toni Warner</b>   |                                      |                                |  |                               |                                  |  |
| Application No.<br><b>09/924,841</b>  | Filing Date<br><b>August 8, 2001</b> | Examiner<br><b>Yong D. Pak</b> | Customer No.<br><b>21036</b>   | Group Art Unit<br><b>1652</b> | Confirmation No.<br><b>2882</b>  |  |
| Invention: <b>MODIFIED SYNTHETASES TO PRODUCE PENICILLINS AND CEPHALOSPORINS UNDER THE CONTROL OF BICARBONATE</b>   |                                      |                                |  |                               |                                  |  |
| <u>COMMISSIONER FOR PATENTS:</u>  |                                      |                                |  |                               |                                  |  |
| Transmitted herewith is an amendment in the above-identified application.   |                                      |                                |  |                               |                                  |  |
| <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27   |                                      |                                |  |                               |                                  |  |
| The fee has been calculated and is transmitted as shown below.  |                                      |                                |  |                               |                                  |  |
| <b>CLAIMS AS AMENDED</b>  |                                      |                                |  |                               |                                  |  |
|   | CLAIMS REMAINING<br>AFTER AMENDMENT  | HIGHEST #<br>PREV. PAID FOR    | NUMBER EXTRA<br>CLAIMS PRESENT   | RATE                          | ADDITIONAL<br>FEE                |  |
| TOTAL CLAIMS  | 3 -                                  | 45 =                           | 0  | x \$9.00                      | \$0.00                           |  |
| INDEP. CLAIMS   | 2 -                                  | 16 =                           | 0  | x \$43.00                     | \$0.00                           |  |
| Multiple Dependent Claims (check if applicable) <input type="checkbox"/>  |                                      |                                |  |                               | \$0.00                           |  |
| <b>TOTAL ADDITIONAL FEE FOR THIS AMENDMENT</b>  |                                      |                                |  |                               | <b>\$0.00</b>                    |  |
| <input checked="" type="checkbox"/> No additional fee is required for amendment.<br><input type="checkbox"/> Please charge Deposit Account No. _____ in the amount of _____<br><input type="checkbox"/> A check in the amount of _____ to cover the filing fee is enclosed.<br><input checked="" type="checkbox"/> The Director is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. <b>13-0610</b><br><input checked="" type="checkbox"/> Any additional filing fees required under 37 C.F.R. 1.16.<br><input checked="" type="checkbox"/> Any patent application processing fees under 37 CFR<br><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.<br><b>WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</b> |                                      |                                |  |                               |                                  |  |
| <br>_____<br>Signature   |                                      |                                | Dated: <b>July 28, 2005</b>  |                               |                                  |  |
| <b>Ian C. McLeod</b><br><b>Registration No. 20,931</b><br><b>McLeod &amp; Moyne, P.C.</b><br><b>2190 Commons Parkway</b><br><b>Okemos, Michigan 48864</b><br><b>(517) 347-4100</b>  |                                      |                                | <div style="border: 1px solid black; padding: 5px;">             I certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on<br/> <b>July 28, 2005</b><br/>             _____<br/>             (Date)<br/> <br/> <br/>             _____<br/>             Signature of Person Mailing Correspondence<br/> <b>Tammi L. Taylor</b><br/>             _____<br/>             Typed or Printed Name of Person Mailing Correspondence           </div> |                               |                                  |  |
| cc:   |                                      |                                |  |                               |                                  |  |



MSU 4.1-560  
Appl. No. 09/924,841  
Amdt. dated July 26, 2005  
Reply to Office Action of June 02, 2005

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appl. No. : 09/924,841 Confirmation No. 2882  
Applicants : David R. Dilley, Dina L. Kadyrzhanova,  
Zhenyong Wang and Toni M. Warner  
Filed : August 08, 2001  
Title : MODIFIED SYNTHETASES TO PRODUCE  
PENICILLINS AND CEPHALOSPORINS UNDER THE  
CONTROL OF BICARBONATE  
TC/A.U. : 1652  
Examiner : Yong D. Pak  
Docket No. : MSU 4.1-560  
Customer No. : 21036  
Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**AMENDMENT UNDER 37 C.F.R. § 1.116**

Sir:

In response to the Office Action mailed June 02, 2005, Applicants amend and remark as follows:

**Amendments to the Claims** are reflected in the Listing of Claims which begins on page 2 of this paper.

**Remarks** begin on page 4 of this paper.